

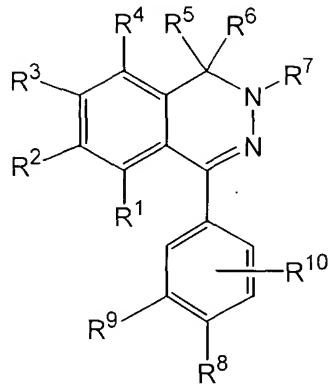
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PRELIMINARY AMENDMENT
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In the claims

Please amend the claims as follows:

1-9. (canceled)

10. (original) A method for treating a patient having a disorder associated with excessive activation of the α -amino-3-hydroxy-5-methyl-4-isooxazolepropionic acid (AMPA) subtype of the ionotropic excitatory amino acid (EAA) receptors, the method comprising administering to the patient, in an effective amount to alleviate the symptoms of the disorder, a compound of Formula I:



wherein

R¹, R², R³ and R⁴ are independently

H,

HO,

R¹¹O-,

halogen (F, Cl, Br),

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C1-C3-alkyl,

CF₃,

R¹²CO₂-,

R¹²O₂C-,

R¹²CO-,

R¹²CONH-,

R¹²NHCO-,

R¹²NHCO₂-,

R¹²OCONH-,

R¹²O₂S-,

R¹²OS-, or

R¹³R¹⁴N-; or

R¹ and R², or R² and R³, or R³ and R⁴ taken together can be

-SCH₂S-,

-SCH₂O-,

-OCH₂S-,

-SCH₂CH₂S-,

-SCH₂CH₂O-, or

-OCH₂CH₂S-;

wherein at least one of R¹, R², R³ and R⁴ must be a C1-C3-alkylthio group,

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R^5 and R^6 are independently

H,

C1-C6-alkyl,

C3-C6-alkenyl,

C3-C6-cycloalkyl, or

phenyl or substituted phenyl, wherein the phenyl is substituted with one or two substituents selected from the group consisting of C1-C3-alkyl, halogen (F, Cl, Br),

$R^{11}O^-$, CF_3^- , $R^{12}O_2S^-$, $R^{12}OS^-$, $R^{12}CO$, $R^{12}CO_2^-$, $R^{12}O_2C^-$, $R^{12}CONH^-$, $R^{12}NHCO^-$,

$R^{12}NHCO_2^-$, $R^{12}OCONH$, and $R^{13}R^{14}N^-$; or

R^5 and R^6 taken together can be C3-C6-cycloalkyl;

R^7 is

$R^{13}R^{14}NCO^-$,

$R^{13}R^{14}NCS^-$,

$R^{13}R^{14}N(CR^{15})^-$,

$R^{15}OCO^-$,

$R^{13}CO^-$,

$R^{13}R^{14}NCH_2CO^-$,

$R^{12}O_2C-(CH_2)_n^-$,

$R^{13}R^{14}NCO-(CH_2)_n^-$,

$NC-(CH_2)_n^-$,

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H,

C1-C6-alkyl,

C3-C6-alkenyl, or

C3-C6-cycloalkyl; or

R⁶ and R⁷ taken together can be

-(CH₂)_mCH₂(R¹³)NCO-,

-(CH₂)_mCH₂OCO-, or

-(CH₂)_mCH₂CH₂CO-;

R⁸ and R⁹ are independently

H,

R¹³R¹⁴N-,

R¹³R¹⁴N(CR¹⁵)-,

R¹²HNCO-, or

R¹²CONH-;

R¹⁰ is

H,

halogen (F, Cl, Br),

HO,

R¹¹O-,

R¹³R¹⁴N-,

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C1-C3-alkyl,

CF₃,

R¹²CO₂-,

R¹²CO-, or

R¹²CONH-;

R¹¹ is C1-C3-alkyl;

R¹² is H or C1-C3-alkyl;

R¹³ and R¹⁴ are independently

H,

C1-C10-alkyl,

C1-C6-perfluoroalkyl,

C3-C10-alkenyl, or

C3-C6-cycloalkyl; or

R¹³ and R¹⁴ taken together can be C3-C6-cycloalkyl;

R¹⁵ is C1-C6-alkyl, C3-C6-alkenyl, or C3-C6-cycloalkyl;

n is 1 to 6;

m is 0 to 2;

and pharmaceutically acceptable salts thereof;

wherein R⁸ and R⁹ cannot be both be H,

in combination with a pharmaceutically acceptable carrier.

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11. (original) The method of claim 10 wherein, in the compound of Formula I, one of four substituents of R^1 , R^2 , R^3 and R^4 must be C1-C3-alkylthio group, the other substituents are independently H, $R^{11}O$ -, $R^{11}S$ -, halogen (F, Cl, Br), or C1-C3-alkyl; R^2 and R^3 taken together can be $-SCH_2S$ -, $-SCH_2O$ -, or $-OCH_2S$;- R^7 is

$$R^{13}R^{14}NCO-,$$

R¹³R¹⁴NCS-,

$$R^{13}R^{14}N(CR^{15}).$$

$$R^{15}OCO\cdot,$$

R¹³CO-, or

H;

R^8 and R^9 are independently H, H_2N - or CH_3CONH -; and pharmaceutically acceptable salts thereof.

12. (original) The method of claim 11 wherein the compound of Formula I is selected from the group consisting of

4-(4-Aminophenyl)-1,2-dihydro-1-methyl-2-ethylcarbamoyl-6-methylthiophthalazine, 4-(4-Aminophenyl)-1,2-dihydro-1-methyl-2-*n*-propylcarbamoyl-6-methylthiophthalazine, 4-(4-Aminophenyl)-1,2-dihydro-1-methyl-2-*n*-butylcarbamoyl-6-methylthiophthalazine, 4-(4-Aminophenyl)-1,2-dihydro-2-ethylcarbamoyl-6-methylthiophthalazine, 4-(4-Aminophenyl)-1,2-

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dihydro-2-*n*-propylcarbamoyl-6-methylthiophthalazine, and 4-(4-Aminophenyl)-1,2-dihydro-2-*n*-butylcarbamoyl-6-methylthiophthalazine.

13. (original) The method of claim 10 wherein the disorder is selected from the group consisting of neurological, neuropsychological, neuropsychiatric, neurodegenerative, neuropsychopharmacological and functional disorders.

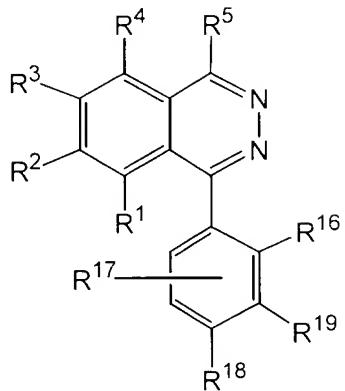
14. (original) The method of claim 11 wherein the disorder is selected from the group consisting of neurological, neuropsychological, neuropsychiatric, neurodegenerative, neuropsychopharmacological and functional disorders.

15. (original) The method of claim 12 wherein the disorder is selected from the group consisting of neurological, neuropsychological, neuropsychiatric, neurodegenerative, neuropsychopharmacological and functional disorders.

16-24. (cancelled)

25. (original) A method for treating a patient having a disorder associated with excessive activation of the α -amino-3-hydroxy-5-methyl-4-isooxazolepropionic acid (AMPA) subtype of the ionotropic excitatory amino acid (EAA) receptors, the method comprising administering to the patient, in an effective amount to alleviate the symptoms of the disorder, a compound of Formula II:

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wherein

R^1 , R^2 , R^3 and R^4 are independently

H,

HO,

$R^{11}O^-$,

halogen (F, Cl, Br),

C1-C3-alkyl,

CF_3 ,

$R^{12}CO_2^-$,

$R^{12}O_2C^-$,

$R^{12}CO^-$,

$R^{12}CONH^-$,

$R^{12}NHCO^-$,

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$R^{12}NHCO_2-$,

$R^{12}OCONH-$,

$R^{12}O_2S-$,

$R^{12}OS-$, or

$R^{13}R^{14}N-$; or

R^1 and R^2 , or R^2 and R^3 , or R^3 and R^4 taken together can be

$-SCH_2S-$,

$-SCH_2O-$

$-OCH_2S-$

$-SCH_2CH_2S-$,

$-SCH_2CH_2O-$, or

$-OCH_2CH_2S-$;

wherein at least one of R^1 , R^2 , R^3 and R^4 must be a C1-C3-alkylthio group;

R^5 is

H,

C1-C6-alkyl,

C3-C6-alkenyl,

C3-C6-cycloalkyl,

phenyl or substituted phenyl, wherein the phenyl is substituted with one or two substituents selected from the group consisting of C1-C3-alkyl, halogen (F, Cl, Br),

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$R^{11}O^-$, CF_3^- , $R^{12}O_2S^-$, $R^{12}OS^-$, $R^{12}CO$, $R^{12}CO_2^-$, $R^{12}O_2C^-$, $R^{12}CONH^-$, $R^{12}NHCO^-$,

$R^{12}NHCO_2^-$, $R^{12}OCONH$, or $R^{13}R^{14}N^-$;

R^{11} is C1-C3-alkyl;

R^{12} is H or C1-C3-alkyl;

R^{13} and R^{14} are independently

H,

C1-C10-alkyl,

C1-C6-perfluoroalkyl,

C3-C10-alkenyl, or

C3-C6-cycloalkyl; or

R^{13} and R^{14} taken together can be C3-C6-cycloalkyl;

R^{15} is C1-C6-alkyl, C3-C6-alkenyl, or C3-C6-cycloalkyl;

R^{16} and R^{17} are independently

H,

halogen (F, Cl, Br),

C1-C3-alkyl,

$R^{12}O^-$,

CF_3^- , or

$R^{12}CO_2^-$;

R^{18} and R^{19} are independently

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H,

$R^{13}R^{14}N\text{-}$,

$R^{13}HNC(NH)\text{-}$, or

$R^{12}CONH\text{-}$;

and pharmaceutically acceptable salts thereof;

wherein R^{18} and R^{19} cannot both be H,

in combination with a pharmaceutically acceptable carrier.

26. (original) The method of claim 25 wherein, in the compound of Formula II, one of four substituents of R^1 , R^2 , R^3 and R^4 must be a C1-C3-alkylthio group, the other substituents are independently H, $R^{11}O\text{-}$, $R^{11}S\text{-}$, halogen (F, Cl, Br), or C1-C3-alkyl; R^2 and R^3 taken together can be $-\text{SCH}_2\text{S-}$, $-\text{SCH}_2\text{O-}$, or $-\text{OCH}_2\text{S-}$; R^{18} and R^{19} are independently H, $H_2N\text{-}$, or $CH_3CONH\text{-}$; and pharmaceutically acceptable salts thereof.

27. (original) The method of claim 26 wherein the compound of Formula II is selected from the group consisting of

1-(4-Aminophenyl)-6-methylthiophthalazine, 1-(4-Acetylaminophenyl)-6-methylthiophthalazine, 1-(4-Aminophenyl)-7-methylthiophthalazine, 1-(4-Acetylaminophenyl)-7-methylthiophthalazine, 1-(4-Aminophenyl)-4-methyl-6-methylthiophthalazine, 1-(4-Acetylaminophenyl)-4-methyl-6-methylthiophthalazine, 1-(4-Acetylaminophenyl)-4-methyl-6-methylthiophthalazine, 1-(4-

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Aminophenyl)-4-methyl-7-methylthiophthalazine, and 1-(4-Acetylaminophenyl)-4-methyl-7-methylthiophthalazine.

28. (original) The method of claim 25 wherein the disorder is selected from the group consisting of neurological, neuropsychological, neuropsychiatric, neurodegenerative, neuropsychopharmacological and functional disorders.

29. (original) The method of claim 26 wherein the disorder is selected from the group consisting of neurological, neuropsychological, neuropsychiatric, neurodegenerative, neuropsychopharmacological and functional disorders.

30. (original) The method of claim 27 wherein the disorder is selected from the group consisting of neurological, neuropsychological, neuropsychiatric, neurodegenerative, neuropsychopharmacological and functional disorders.